RCRA Subtitle I Inspection Report

UST Compliance Inspection

Ashland, Inc. 329 West Main Street Elkton, MD 21921

Date of Inspection: March 23, 2010

Facility Identification Number: 0002738

EPA Rep	presentat	ives:
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Jan Szaro, Environmental Engineer U.S. Environmental Protection Agency (215) 814-3421

Jeanna Henry, Environmental Scientist U.S. Environmental Protection Agency (215) 814-2820

Gary Morton, Environmental Protection Specialist U.S. Environmental Protection Agency (215) 814-3159

State Representative:

Baruch Onyekwelu Maryland Department of the Environment (410) 537-3400

Tank Owner:

Ashland, Inc. 329 West Main Street Elkton, MD 21921

Facility Representatives:

Bill Hill, Site Supervisor Gordon Mueller, Quality Manager Andre Simmons, Process Engineer Sam Park, Production Supervisor (410) 392-8811

Inspector Signature:

Date:

5/3/10

Background

On March 23, 2010 the United States Environmental Protection Agency, Region III (EPA) conducted a Compliance Evaluation Inspection (CEI) of the Ashland facility at 329 West Main St. in Elkton, MD to determine the extent of compliance with Subtitle I of the Resource Conservation and Recovery Act (RCRA). USEPA Inspector Jan Szaro was assigned to conduct this inspection in conjunction with a CEI to also determine compliance with Subtitle C (Hazardous Waste) of RCRA. Mr. Szaro was accompanied by USEPA Inspectors Jeanna Henry and Gary Morton. Maryland Department of the Environment (MDE) was represented by Inspector Baruch Onyekwelu of the MDE Hazardous Waste Program on the day of the inspection.

Inspection Observations

Ashland, Inc. is listed as the owner of the USTs on the facility summary form provided by MDE. This inspector contacted Herb Meade of MDE on March 9, 2010 to coordinate inspection of the USTs at the facility. Mr. Meade informed Inspector Szaro on March 10th that MDE would be unable to send a UST program representative along on the inspection. The tank owner was not contacted prior to the inspection. The inspection was conducted on March 23, 2010. The facility was open and operating during the time of inspection.

This facility is operated as a chemical manufacturing facility for the production of water based polymers primarily for the wood glue industry. Five (5) underground storage tanks (UST) are present at the facility. Four (4) of the USTs are used for chemical raw material storage and one (1) UST is used to store heating oil that is used as a backup fuel source for the onsite boiler that supplies process steam. Two (2) of the chemical USTs store butyl acrylate monomer while the other two (2) chemical USTs store vinyl acetate monomer. The vinyl acetate monomer is listed as a hazardous substance for RCRA Subtitle I purposes. There are no dispensers associated with any of the USTs present at the facility. See Table 1 for basic information of the five (5) USTs.

Table 1 USTs located at Ashland, Inc. # 0002738 Elkton, MD 21921

Tank No.	Material	Capacity (Gal)
	VAM USTs located by East Storage Are	a
1	Vinyl Acetate Monomer (VAM)	25,000
2	Vinyl Acetate Monomer (VAM)	25,000
Heati	ng Oil UST located by Boiler Room & Mainte	enance Shop
3	Heating Oil	10,000
	BA USTs located by North Storage Area	a
4	Butyl Acrylate Monomer (BA)	12,000
5	Butyl Acrylate Monomer (BA)	6,000

This inspector presented credentials on arrival at the facility and explained the purpose of the inspection to the four (4) facility representatives listed on the cover sheet of this report. The facility representatives verified that the facility and the UST systems are owned and operated by Ashland, Inc. It was further stated that the Elkton facility was one of two similar facilities that Ashland acquired from Air Products & Polymers on July 1, 2008. The other facility is located in Piedmont, SC. Facility personnel added that the main person with environmental reporting responsibilities for the two facilities is Marie Stack, who operates out of the Piedmont facility.

The two (2) VAM UST systems are further discussed in detail as they are EPA regulated USTs. A leak detection inspection checklist is included as Attachment 1 for the VAM UST systems. Photographic documentation of selected observations for the UST systems is included as Attachment 2. A site plan of the facility is included as Attachment 3. The UST locations have been highlighted.

General Discussion of VAM UST systems

The VAM USTs were installed in June 1954 while the facility was known as Colton Chemical Company. The USTs are of single wall steel construction. The piping associated with these USTs was observed to be of metal construction and almost exclusively aboveground. Pumps to supply VAM to process tanks from the USTs were observed to be aboveground with supply piping emerging through a bolted manhole on top of each UST. See PHOTOS I-16 through I-20. Portions of the original design and layout drawings of these USTs are included as Attachment 4.

VAM is unloaded mostly by top unloading from railcars where the bottom valve of the railcar is not opened while the railcar is onsite. PHOTO I-7 shows the top unloading line and the vent line at the VAM railcar unloading area. The railcar unloading area is across the facility from the VAM UST area. A separate unloading line exists for tank trucks to gravity unload. This tank truck unloading area is immediately east of the VAM UST area and is shown in PHOTO I-21. This truck unloading area is equipped with secondary containment.

Release Detection

Electronic tank level readouts for the VAM USTs were observed in the scale house by the VAM storage area (PHOTO I-3) and in the shed by the VAM railcar unloading area. (PHOTO I-8) No historical documentation of tank volume was available at the facility.

Monitor ports for vapor monitor sampling were observed at four points in the VAM UST area and are shown in PHOTOS I-2, I-21 and I-22. Facility personnel stated that the analysis of the vapor sampling is conducted by gas chromatography performed onsite. Monthly sampling results from January 2007 through the present were provided with all results listed as 0.

The facility personnel could not provide the site assessment for the design and operation of the vapor monitoring system at the time of the inspection. It has since been provided and is included as Attachment 5. Standard operating procedures (SOP) were provided for vinyl acetate underground leak monitoring, GC headspace calibration and headspace gas chromatograph analysis. These procedures are included as Attachment 6.

Spill & Overfill

Spill buckets were not observed for the VAM USTs. The unloading lines are hard-piped to the top of the VAM USTs. See PHOTO I-17 which depicts the fill connection at the center of the photo. The small stainless steel line is a recirculation line from the process supply pump which is used if the pump needs to regain suction. Usually occurs after a railcar delivery when nitrogen is used to purge the unloading line. At the railcar unloading area flex lines are broken directly above the manhole of the railcar so that any spillage will drop into the railcar. At the tank truck unloading area unloading takes place over a secondary containment area which will catch any spills.

Overfill protection is provided by an audible alarm that can be heard throughout the entire facility. Facility personnel ran a satisfactory test of the audible alarm while the inspectors were present. The alarm test and silence buttons are shown in PHOTO I-8 on the control panel at the VAM railcar unloading shed.

Corrosion Protection

According to the notification form the product lines are of single-walled metal construction. The USTs were installed in 1954 and are of single-walled steel design. An impressed current cathodic protection was observed and noted to be functioning. The rectifier box was observed inside the Scale House and is shown in PHOTOS I-14 and I-15. The readings were 34 volts and 7.2 amps at the time of inspection. A log of impressed current readings from 9/26/08 until the present was obtained and is included as Attachment 7. There were no observable periods when log entries were of greater than 60 day increments. The report from a survey conducted by Corrpro on November 13, 2009 is included as Attachment 8. A report from corrosion testing conducted on November 14, 2008 was also made available by the facility. A separate report from Corrpro documents the installation and post-installation testing of the impressed current system in 1998. The report is included as Attachment 9.

Financial Assurance

Self-insured financial assurance documentation dated December 15, 2008 was made available to the inspectors. The documentation is a yearly requirement which would have been due by December 15, 2009 but EPA does not have a financial assurance requirement for hazardous substance USTs.

Secondary Containment

Hazardous substance USTs were required to have secondary containment by December 22, 1998. The vinyl acetate monomer (VAM) stored in USTs at the Elkton facility is on the hazardous substance list. Discussion with the facility representatives confirmed that the VAM USTs at the facility are single-walled steel tanks with no means of secondary containment. The facility representative further confirmed that these USTs are the original USTs that were installed in the 1950s.

Attachments

- 1. Leak Detection Inspection Checklist
- 2. Photographs
- 3. Facility Site Plan
- 4. 1950s VAM UST drawings
- 5. Vapor Monitoring Site Survey
- 6. Vapor monitoring results & procedures
- 7. Impressed current inspections for VAM & Heating Oil USTs (9/26/08 3/15/10)
- 8. 2009 Corrpro cathodic protection survey
- 9. 1998 Corrpro catodic protection installation report

ATTACHMENT 1

Leak Detection Inspection Checklist

I. Ownership of Tank(s)			II. Loc	ation of Tank(s)		
shland, Inc. 29 West Main Street lkton, MD 21921			Same as Owner Number of Tanks at This Location: 2			
I. Tank Information Complete for each information for ac			more than 4 tanks,	photocopy page and	l complete	
Γank presently in use (circle)	Tank 1 (YES)	Tank 2 (YES)	Tank 3	Tank 4	
f not, date last used	·		-			
f emptied, verify 1" or less of product in tank				· ` ·	<u> </u>	
Month and Year Tank Installed	6/195	4	6/1954	,		
Material of Construction tank/pipe	SWS/S	WS	SWS/SWS		-1	
Capacity of Tank (in gallons)	25,00	0	25,000			
Substance Stored	Vinyl Ac Monon		Vinyl Acetate Monomer			
A. Release Detection For Tanks Che	ck the releas	se detect	ion method(s) used f	or each tank or N/A	if none required.	
Manual Tank Gauging (tanks under 1,000 gal.)						
Manual Tank Gauging and Tank Tightness Testing tanks under 2,000 gal.)						
ank Tightness Testing and Inventory Control		_				
utomatic Tank Gauging						
apor, Groundwater or Interstitial Monitoring	v		v .			
other approved method (SIR)		-			•	
.B. Release Detection For Piping	Chec	k the re	lease detection meth	od(s) used for pipin	g.	
heck Pressurized (P) or Suction (S) Piping for sch tank	S		S			
utomatic Line Leak Detectors, and check one						
apor or Groundwater Monitoring	v		v			
econdary Containment with Monitoring			<u> </u>			
ne Tightness Testing	<u> </u>					
certify thecertify thecertification	at I have insp	pected th	e above named facilit	month/day		

Leak Detection for Piping

ressurized Piping A method must be selected from each set. Where applicable indicate date of last test. If this facility has more than 4 tanks, please photocopy this page and complete information for all additional piping.

et 1	Tank 1	Tank 2	Tank 3	Tank 4
utomatic Flow Restrictor				
utomatic Shut-off Device				
ontinuous Alarm System				
and	, , , , , ,			
et 2				
nnual Line Tightness Testing		·		
terstitial Monitoring				
Interstitial Monitoring, documentation of monthly monitoring is available				
round-Water or Vapor Monitoring			· 	
Ground-Water or Vapor Monitoring, documentation of monthly monitoring is ailable				
her Approved Method (specify in comments section)				
action Piping. Indicate date of most recent test.	注情望			
ne Tightness Testing (required every 3 years)				
condary Containment with Interstitial Monitoring				
ound-Water or Vapor Monitoring	v	v		
her Approved Method (specify in comments section)				
Leak Detection Required ust answer yes to all of the following questions)	X	X		
erates at less than atmospheric pressure	X	X		
s only one check valve, which is located directly under pump	Χ.	X		
pe of piping allows product to drain back into tank when suction released	X	X		
above information on suction piping is verifiable	X	X	-	
the back of this sheet, please sketch the site, noting all piping runs, tanks (ls and their distance from tanks and piping.	including size	and substance	es stored) and	location of
nments: See cutaway sketch in Attchment 4 for piping from USTs				<u> </u>
				
		·	4	
0				· · · · · ·
ector's Signature:	Dat	te: 5 /	3/10	

Inventory Control and Tank Tightness Testing N/A

Method of tank tightness testing: N/A			<u> </u>	· · · · · ·	
Address of tank tightness tester:					
Please complete all information for each tank		s more than 4 tank ormation for all ad		y this page and	
	Tank 1	Tank 2	Tank 3	Tank 4	
Date of last tank tightness test.					
Did tank pass test? Indicate yes or no. If no, specify in omments section below the status of the tank or what ctions have been taken (e.g., has state been notified?)					
Documentation of deliveries and sales balances with daily neasurements of liquid volume in tank are maintained and vailable.					
Overages or shortages are less than 1% + 130 gals of tank's low-through volume.					
no, which months were not?					
lease answer yes or no for each question	张 传页				
wner/operator can explain inventory control methods and fig	gures used and rec	orded.	Yes □	No □	
ecords include monthly water monitoring.			Yes □	No □	
ank inventory reconciled before and after fuel delivery.			Yes □	No □	
ooks are reconciled monthly.			Yes □	No □	
ppropriate calibration chart is used for calculating volume.		·	Yes □	No □	
ispenser pumps are calibrated to within 6 cubic inches per five gallons. Yes □ No □					
he drop tube in the fill pipe extends to within one foot of tank bottom. Yes No No					
wner can demonstrate consistency in dipsticking techniques.	·		Yes □	No 🗆	
ne dipstick is long enough to reach the bottom of the tank. Yes No No					
ne ends of the gauge stick are flat and not worn down. Yes No					
ne dipstick is marked legibly & the product level can be determined to the nearest 1/8th inch. Yes □ No □					
ne tank has been tested within the year & has passed the tightness test (if necessary). Yes □ No □					
third-party certification of the tank tightness test method is available. Yes No					
nk tester complied with all certification requirements. Yes No				No □	
onitoring and testing are maintained and available for the pa	ast 12 months.	<i>I</i> .	Yes □	No □	
				•	
mments:					
				<u> </u>	
pector's Signature:		Date:	5/3/10		

Vapor Monitoring							
Name of monitoring device:							
Date system installed	Number of monitoring wells Four (4	9					
Distance of monitoring well(s) from	tank(s) (1) (2)	(3)	(4)	· ··			
lite assessment was conducted by: R	.E. Wright	. •	·		· .		
ocation of site assessment documen	tation:		1	-			
Please indicate yes or no for o	each tank Please complete all informat tanks, please photocopy this tanks.						
		Tank 1	Tank 2	Tank 3	Tank 4		
Vell is clearly marked and secured.		Y	Y				
Vell caps are tight.		Y	Y	,			
Vell is constructed so that monitorin toisture or other interferences.	g device is not rendered inoperative by	Y	Y				
/ell is free of debris or has other inc	lications that it has been recently checked.	No access	No access	٠			
lease answer yes or no for e	ach question				Market a		
ST excavation zone was assessed p	rior to vapor monitoring system installation.	Yes X	No □				
ne or more USTs is/are included in	system.	Yes X	. No □				
f the system is automatic, ch	eck the following:				20 page 1		
ower box is accessible and power li	ght is on.	Yes □	No □				
ocumentation of monthly readings	is available for last 12 months.	Yes □	No □				
quipment used to take readings is a	ccessible and functional.	Yes □	No □	10 18			
apor monitoring equipment has bee	en calibrated within the last year.	Yes 🗆	No □	The state of			
the system is manual, chec	k the following:		4				
ocumentation of monthly readings	is available for last 12 months.	Yes X	No □				
uipment used to take readings is a	ccessible and functional.	Yes X	No □				
spor monitoring equipment has bee	en calibrated within the last year.	Yes X	No □				
rous material was used for backfil	L ·	Yes □	. No □				
ells are placed within the excavation	on zone.	Yes □	No □				
vel of background contamination is o what is level?	is known.	Yes □	No □	不 是 夏			
the back of this sheet, please sk wells and their distance from ta	etch the site, noting all piping runs, tanks (i aks and piping.	ncluding size	and substanc	es stored) a	nd location		
mments: See Attachment 5. Doc	umentation to support the VAM vapor monitori	ng appears to	be incomplete				
nector's Signature:	<i>I</i>		Data: \	la in			

Site Sketch/Photo Log

Manual Tank Gauging N/A

	y be used as the sole method of leak detection only for tanks	of 1,000 gal. or fewer or in combination with tank
ghtness testing for tanks		
lease indicate the number	er of the tank or tanks for which manual tank gauging is used	d as the main leak detection method (e.g., tanks 1 &
	NT/A	·
1:	N/A	
):	N/A	

iod of at least ([Circle one] 36, 44, 58) hours during which no liquid is added or removed from the tank. The light measurements are based on average of two consecutive stick readings at his beginning and end of period. Thilly average of variation between beginning and end measurements is less and standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The standard shown below for corresponding size and dimensions of tank and ting time. The stand		ALC: THE PARTY NAMED IN		CONTRACTOR OF THE PERSON OF	THE THE PARTY AND THE
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th beginning and end of period. Onthly average of variation between beginning and end measurements is less in standard shown below for corresponding size and dimensions of tank and iting time. Suge stick is long enough to reach bottom of the tank. Ends of gauge stick are tand not worn down. Suge stick is marked legibly and product level can be determined to the nearest e-eighth of an inch. FIG is used as sole method of leak detection for tank. FIG is used in conjunction with tank tightness testing. FIG is used in conjunction with tank tightness testing. FIG is used in conjunction with mark tightness testing. FIG is used in conjunction with mark tightness testing. FIG is used in conjunction with tank tightness testing. FIG is used in conjunction with tank tightness testing. FIG is used in conjunction with mark tightness testing. FIG is used in conjunction with tank tightness testing	iod of at least ([Circle	one] 36, 44, 58) hours du		Yes □	No □
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t and not worn down. To get sused as sole method of leak detection for tank. To get used in conjunction with tank tightness testing. To get all tanks for which MTG is used under 2,000 gallons in capacity? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records available for the last 12 month period? To get monitoring records av	n standard shown belo			Yes □	No □
e-eighth of an inch. TG is used as sole method of leak detection for tank. TG is used in conjunction with tank tightness testing. e all tanks for which MTG is used under 2,000 gallons in capacity? e monitoring records available for the last 12 month period? Check One: Nominal Tank Capacity (in gallons) Tank Dimensions Monthly Standard (in gallons) Tank Dimensions Tank Dimensions Tank Dimensions Monthly Standard (in gallons) Tank Dimensions		gh to reach bottom of the t	ank. Ends of gauge stick are	Yes □	No □
TG is used in conjunction with tank tightness testing. e all tanks for which MTG is used under 2,000 gallons in capacity? e monitoring records available for the last 12 month period? Check One: Nominal Tank Capacity (in gallons) Tank Dimensions Monthly Standard (in gallons) Tank Dimensions	uge stick is marked legibly and product level can be determined to the nearest e-eighth of an inch.			Yes □	No □
e all tanks for which MTG is used under 2,000 gallons in capacity? e monitoring records available for the last 12 month period? Check One: Nominal Tank Capacity (in gallons) Capacity (in gallons) N/A Tank Dimensions Monthly Standard (in gallons) Minimal Tank Capacity (in gallons) N/A Tank Dimensions Monthly Standard (in gallons) Tank Dimensions Monthly Standard (in gallons) Tank Dimensions Monthly Standard (in gallons) Tank Dimensions Monthly Standard (in gallons) Tank Dimensions Monthly Standard (in gallons) Tank Dimensions	ΓG is used as sole met	hod of leak detection for ta	ank.	Yes □	No □
e monitoring records available for the last 12 month period? Check One: Nominal Tank Tank Dimensions Monthly Standard Minimal Capacity (in gallons) Durition	ΓG is used in conjunction with tank tightness testing.			Yes □	No □
Check One: Nominal Tank Tank Dimensions Monthly Standard (in gallons) Minimulation (in gallons) () 110-550 N/A 5 36 h () 551 - 1,000* N/A 7 36 h () 1,000* 64" diameter x 73" 4 44 h	e all tanks for which MTG is used under 2,000 gallons in capacity?		Yes □	. No □	
Capacity (in gallons) During (in gallons) During (in gallons) () 110-550 N/A 5 36 h () 551 - 1,000* N/A 7 36 h () 1,000* 64" diameter x 73" 4 44 h	e monitoring records a	vailable for the last 12 mo	nth period?	Yes □	No 🗆
() 551 - 1,000* N/A 7 36 h () 1,000* 64" diameter x 73" 4 44 h	Check One:	Capacity	Tank Dimensions		Minimum Test Duration
() 1,000* 64" diameter x 73" 4 44 h	. ()	110-550	N/A	5	36 hours
	() ,	551 - 1,000*	N/A	7	36 hours
}	. ()	1,000*	64" diameter x 73" length	4	44 hours
() 1,000* 48" diameter x 128" 6 58 h	()	1,000*	1	6	58 hours
() 1,001 - 2,000* N/A 13 36 h	()	1,001 - 2,000*	N/A	13	36 hours
			+ + 1		
		`			
	actoria Siamatana	Q . D			lin .
ector's Signature: Date: 5/3/12	ector's Signature:	Jan Jan	<u> </u>	Date: \(\sigma / 3/	75

oility	TT	Mum	har
acility	ענ	Num	ber

0002738

Ground Water Monitoring N/A

ate System Installed:	N/	A			
istance of well from tank(s) (1)	(2)	(3)	(4)	
istance of well from piping (1)	_ (2)	(3)	(4)	
te assessment was conducted by:		<u> </u>			· · · · · · · · · · · · · · · · · · ·
ocation of site assessment documentation:			.		· .
lease answer each question of each v	vell	If there are more	than 4 wells, plea	se photocopy this pa	ge and complete
			for all additional v		
Vell is clearly marked and secured to avoid una	uthorized	Well 1	Well 2	Well 3	Well 4
/ell was opened and presence of water was ob-	served in				
lease answer yes or no for each ques	tion				选择程 定
ells are used to monitor piping.				Yes □	No □
ite assessment was performed prior to installat	ion of wells.	•		Yes □	No □
ocumentation of monthly readings is available	e		· ·	Yes □	No □
pecific gravity of product is less than one.	<u>.</u>			Yes □	No □
ydraulic conductivity of soil between UST sysn/sec. According to:	stem and mo	nitoring wells is no	ot less than 0.01	Yes □	No 🗆
roundwater is not more than 20 feet from groundwater	und surface.			Yes □	No 🗆
ells are sealed from the ground surface to top	of filter pac	k		Yes □	No □
ontinuous monitoring device or manual bailin e-eighth of an inch of the product on top of g			esence of at least	Yes □	. No □
oundwater is monitored:() Manually on a monitored:() Automatically ([Circle one]).	, .	· ·
eck the following if groundwater is monitore actional.	d <u>manually</u> :	Bailer used is acce	essible and	Yes □	No □
eck the following if groundwater is monitore	dautomatica	ally: Monitoring bo	ox is operational.	Yes □	No □
the back of this sheet, please sketch the si wells and their distance from tanks and pi	te, noting a	II piping runs, tan	ks (including size	Yes □ and substances store	No □ d) and location
mments:					
					· · · · · · · · · · · · · · · · · · ·
pector's Signature:			Date:	5/3/10	

0002738			
	00	02	738

Interstitial Monitoring N/A

vianulacturer and name of system:	· 		
Date system installed:			
Materials used for secondary barrier:			· .
Materials used for internal lining:	· ·		
nterstitial space is monitored (Circle one): automatically, continuously, monthly basis. Please answer yes or no for each question			
All tanks in system are fitted with secondary containment and interstitial monitoring.	Yes □	No □	N/A □
System is designed to detect release from any portion of UST system that routinely contains product.	Yes □	No □	N/A □
Monitoring method is documented as capable of detecting a leak as small as .1 gal./hr. with at least a 15% probability of detection and a probability of false alarm of no more than 5%.	Yes 🗆	No □	N/A 🗆
Documentation of monthly readings is available for last 12 months.	Yes□	No □	N/A □
Maintenance and calibration documents and records are available and indicate appropriate naintenance procedures for system have been implemented.	Yes □	No 🗆	N/A □
Ionitoring box, if present, is operational.	Yes □	No □	N/A □
f monitoring wells are part of leak detection system, monitoring wells are clearly marked and secured avoid unauthorized access and tampering.	Yes □	No □	N/A □ -
nterstitial space is monitored manually on monthly basis (answer the following question).	Yes 🗆	No □	N/A □
quipment used to take readings is accessible and functional.	Yes □	No □	N/A □
ank is double-walled	Yes □	No □	N/A □
ank is fitted with internal bladder to achieve secondary containment (answer the following uestion).	Yes □	No □	N/A □ .
ladder is compatible with substance stored and will not deteriorate in the presence of that substance.	Yes □	No □	N/A □
xcavation is lined with impervious artificial material to achieve secondary containment nswer the following questions).	Yes □	No 🗆	N/A □
condary barrier is always above groundwater.	Yes □	No □	N/A □
secondary barrier is not always above groundwater, secondary barrier and monitoring designs are ruse under such conditions.	Yes □	No 🗆	N/A □
condary barrier is constructed from artificially constructed material, with permeability to substance 10 ⁶ cm/sec.	Yes 🗆	No □	N/A □
condary barrier is compatible with the regulated substances stored and will not deteriorate in esence of that substance.	Yes 🗆 .	No 🗆	N/A □
condary barrier does not interfere with operation of cathodic protection system.	Yes □	No □	N/A □
mments:	· · · · · ·	· · ·	· ·
pector's Signature: January Date: 3/3/	in	· · · · · · · · · · · · · · · · · · ·	

Automatic Tank Gauging N/A

Manufacturer, name and model number of system:		
· · · · · · · · · · · · · · · · · · ·	·	
Please answer yes or no for each question	i tre	
Device documentation is available at site (e.g., manufacturer's brochures, owner's manual).	Yes □	, No □
Device can measure height of product to nearest one-eighth of an inch.	Yes □	No 🗆
Documentation shows that water in bottom of tank is checked monthly to nearest one-eighth of an inch.	Yes □	No □
Documentation is available that the ATG was in test mode a minimum of once a nonth.	Yes □	No 🗆
Checked for presence of gauge in tanks.	Yes □	No □
Checked for presence of monitoring box and evidence that device is working (i.e., evice is equipped with roll of paper for results documentation).	Yes □	No 🗆
Owner/operator has documentation on file verifying method meets minimum erformance standards of .20 gph with probability of detection of 95% and robability of false alarm of 5% for automatic tank gauging (e.g., results sheets nder EPA's "Standard Test Procedures for Evaluating Leak Detection 1ethods").	Yes □	No 🗆
hecked documentation that system was installed, calibrated, and maintained coording to manufacturer's instructions.	Yes □	No □
faintenance records are available upon request.	Yes □	No □
Ionthly testing records are available for the past 12 months.	Yes □	No □
aily monitoring records are available for the past 12 months (if applicable).	Yes 🗆	No □
mments: Facility has electronic level gauges,	but not ATGs	· · · · · · · · · · · · · · · · · · ·
		·.
pector's Signature:	Date: 5/3/10	

Statistical Inventory Reconciliation N/A

lease complete all information for each tank If this facility has more than 4 tank complete the information for all ad		y this page and
ocumentation of deliveries and sales balances with daily leasurements of liquid volume in tank are maintained and vailable.		3,50
lease answer yes or no for each question		
ecords include monthly water monitoring.	Yes □	No □
ank inventory reconciled before and after fuel delivery.	Yes □	No □
ppropriate calibration chart is used for calculating volume.	Yes □	No □
ispenser pumps are calibrated to within 6 cubic inches per five gallons.	Yes □	No □
he drop tube in the fill pipe extends to within one foot of tank bottom.	Yes □	No □
nswer one of the following three:		
Owner can demonstrate consistency in dipsticking techniques.	Yes □	No □
i) The dipstick is long enough to reach the bottom of the tank.	Yes □	No □
) The end of the gauge stick is flat and not worn down.	Yes □	No □
:) The dipstick is legible & the product level can be determined to the nearest 1/8th inch.	Yes □	No □
<u>OR</u>		
Automatic tank gauge is used for readings.	Yes □	No □
OR		
Other method is used for readings (explain in comment section below).	Yes □	No □
third-party certification of the SIR method is available.	Yes □	No □
onitoring and testing records are maintained and available for the past 12 months.	Yes □	No □
omments:	`. 	
pector's Signature:	10/10	

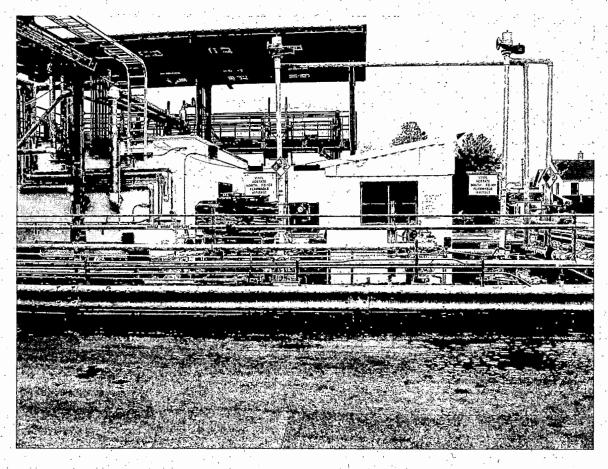
Spill/C	Overfill P	revention		
	Tank 1	Tank 2	Tank 3	Tank 4
re all tank transfers less than 25 gallons?	Yes □ No X	Yes □ No X	Yes □ No □	Yes □ No □
pill Prevention			(基)基层	為非民
s there a spill bucket (at least 5 gallons) or another device nat will prevent release of product to the environment (such s a dry disconnect coupling)?	Yes X No □	Yes X No □	Yes □ No □	Yes □ No □
Overfill Prevention			计程序	
What device is used to prevent tank from being overfilled?				
Ball float valve	Yes □ No □-	Yes □ No □	Yes □ No □	Yes □ No □
Butterfly valve (in fill pipe)	Yes □ No □	Yes □ No □	Yes □ No □	Yes □ No □
Automatic alarm monitoring is used	Yes X No □	Yes X No □	Yes □ No □	Yes □ No □
Other alarm system	Yes □ No □	Yes □ No □	Yes □ No □	Yes □ No □
		CONTRACTOR OF THE PARTY OF THE	STATE OF THE PROPERTY OF THE P	140
Cat	hodic Pro	tection		
	hodic Pro Tank 1	tection Tank 2	Tank 3	Tank 4
acrificial Anode System est results show a negative voltage of at least 0.85 Volts using the tank and a copper/copper sulfate cell)?			Tank 3 Yes No	Tank 4 Yes No
acrificial Anode System est results show a negative voltage of at least 0.85 Volts	Tank 1	Tank 2		
acrificial Anode System est results show a negative voltage of at least 0.85 Volts using the tank and a copper/copper sulfate cell)? the last two test results are available. (Tests are required	Tank 1 Yes No	Tank 2 Yes □ No □	Yes 🗆 No 🗆	Yes No
acrificial Anode System est results show a negative voltage of at least 0.85 Volts using the tank and a copper/copper sulfate cell)? he last two test results are available. (Tests are required very three years.)	Tank 1 Yes No	Tank 2 Yes □ No □	Yes 🗆 No 🗆	Yes No
acrificial Anode System est results show a negative voltage of at least 0.85 Volts using the tank and a copper/copper sulfate cell)? he last two test results are available. (Tests are required very three years.) npressed Current	Tank 1 Yes □ No □ Yes □ No □	Tank 2 Yes No Yes No	Yes No Yes No	Yes No
acrificial Anode System est results show a negative voltage of at least 0.85 Volts using the tank and a copper/copper sulfate cell)? the last two test results are available. (Tests are required very three years.) Inpressed Current ectifier is on 24 hours a day? the last two test results are available? (Tests are required)	Tank 1 Yes □ No □ Yes □ No □	Tank 2 Yes □ No □ Yes □ No □	Yes No Yes No	Yes No Yes No
est results show a negative voltage of at least 0.85 Volts using the tank and a copper/copper sulfate cell)? The last two test results are available. (Tests are required very three years.) Inpressed Current Ectifier is on 24 hours a day? The last two test results are available? (Tests are required ery 60 days.) St results show a negative voltage of at least 0.85 Volts	Tank 1 Yes □ No □ Yes □ No □ Yes X No □ Yes X No □	Tank 2 Yes □ No □ Yes □ No □ Yes X No □ Yes X No □	Yes No Yes No Yes No Yes No	Yes No Yes No Yes No Yes No
est results show a negative voltage of at least 0.85 Volts using the tank and a copper/copper sulfate cell)? The last two test results are available. (Tests are required very three years.) Inpressed Current Ectifier is on 24 hours a day? The last two test results are available? (Tests are required ery 60 days.) St results show a negative voltage of at least 0.85 Volts	Yes □ No □ Yes □ No □ Yes X No □ Yes X No □	Yes No D Yes No D Yes X No D Yes X No D	Yes No Yes No Yes No Yes No Yes No	Yes No Yes No Yes No Yes No Yes No

pector's Signature: ___

Date: Slafts

ATTACHMENT 2

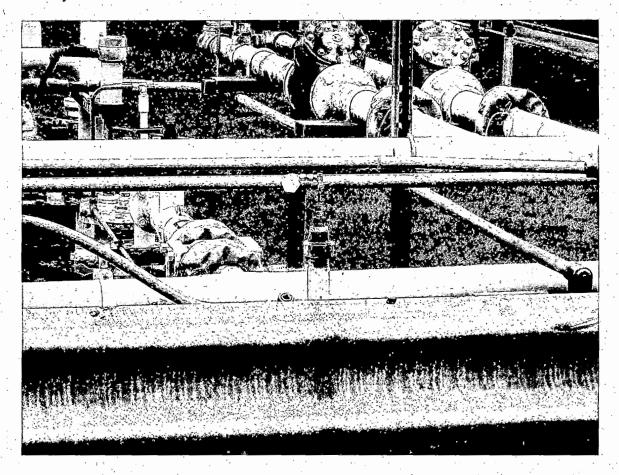
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Vinyl Acetate Monomer (VAM) UST Area Overview of the area and the light blue aboveground piping system Signs designate the North VAM UST (left) and the South VAM UST (right)

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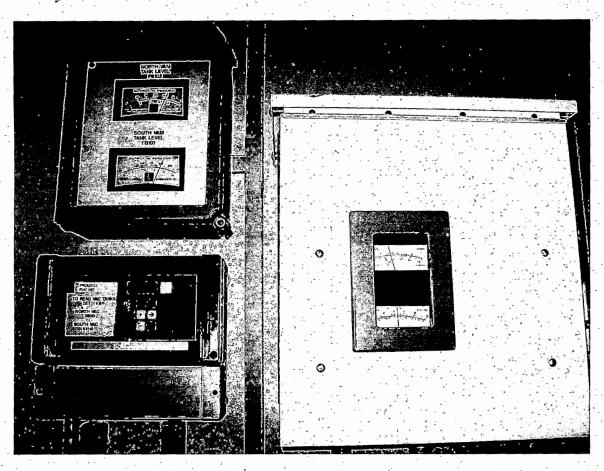
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VAM UST Area
One of the vapor monitoring ports at center of photo

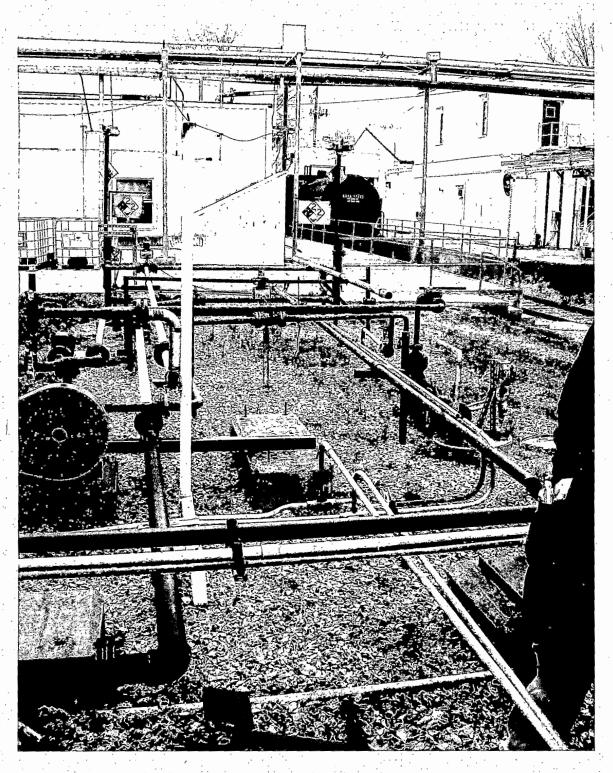
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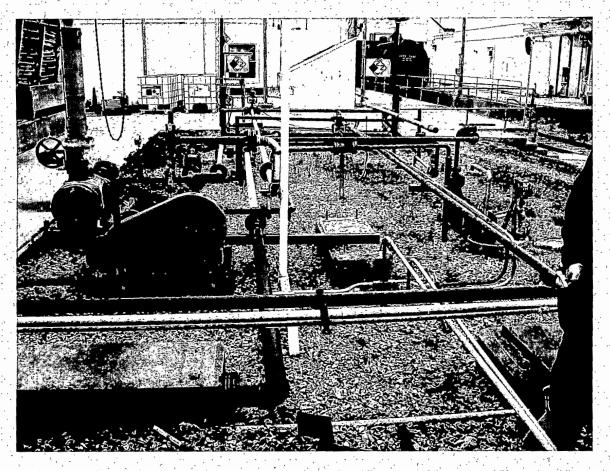
Scale House, directly across from VAM UST Area Level monitors for the VAM USTs at left Rectifier Box for the VAM USTs at right

3/23/10



Butyl Acrylate (BA) UST storage area – near North Tank Farm Overview of the area and the aboveground piping

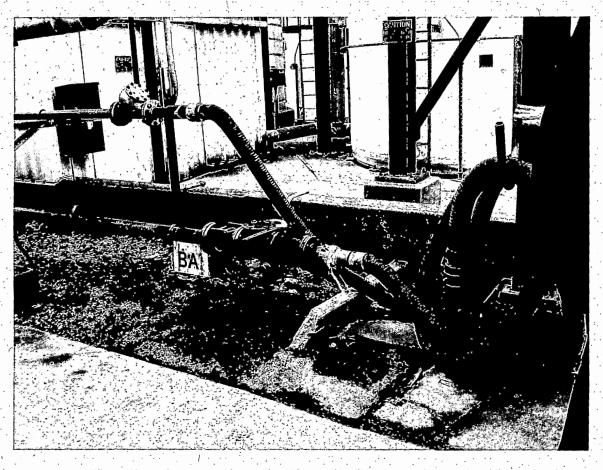
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BA UST storage area
Overview of the area of the two UST systems
Railcar at right is at one of the product loading positions on the loading siding

3/23/10

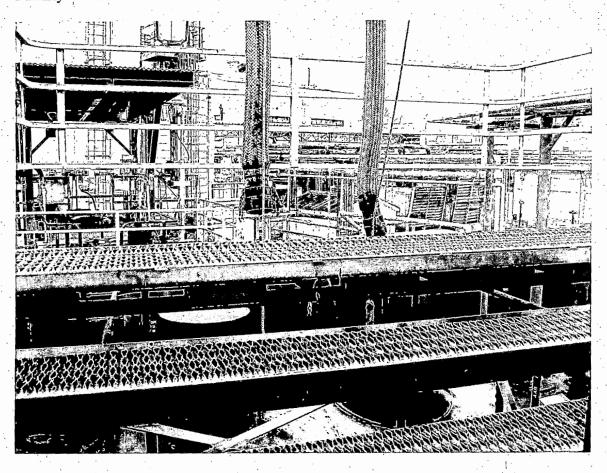
PHOTO I-6



BA tank truck unloading area Bottom line is product unload Top line is vapor return to the tank truck

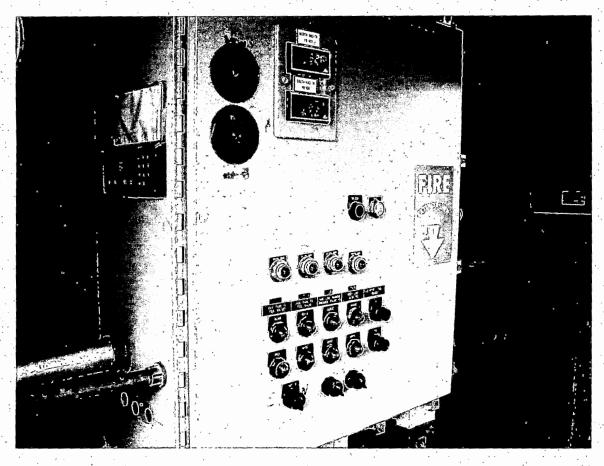
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PHOTO I-7



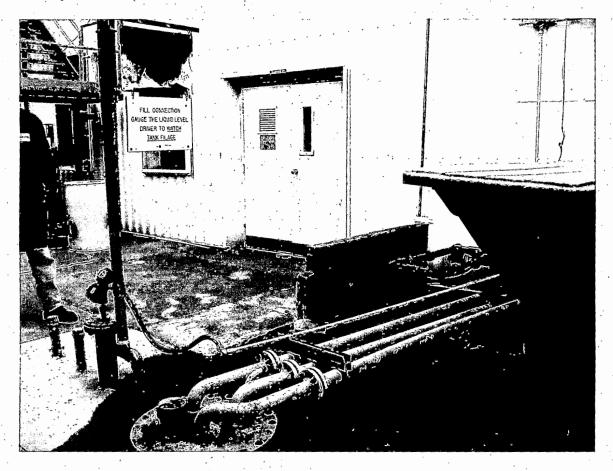
VAM Railcar unloading hoses, railcar is located underneath on unloading siding One hose for top unloading of material, other hose for vapor return to the railcar

3/23/10



Shed at VAM railcar unloading area
Control box for VAM unloading, box includes level monitors for VAM USTs and remote
control for VAM unloading valve train
Alarm test and silence buttons at left of fire extinguisher label

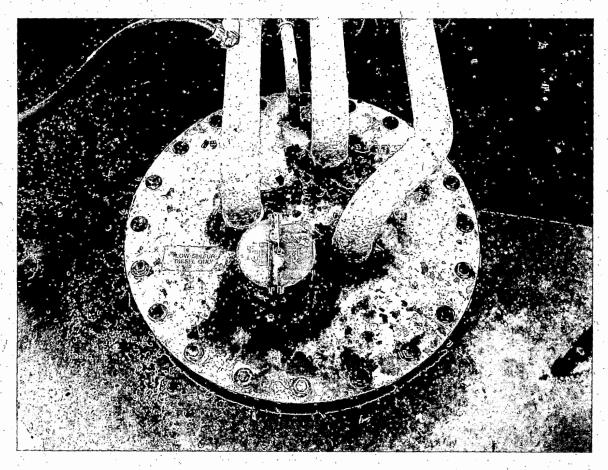
3/23/10



Fuel Oil UST Area, outside of Maintenance Shop & Boiler Room Level monitor readout at left of vent line Capped fill connection extending upward from manhole, piping all aboveground

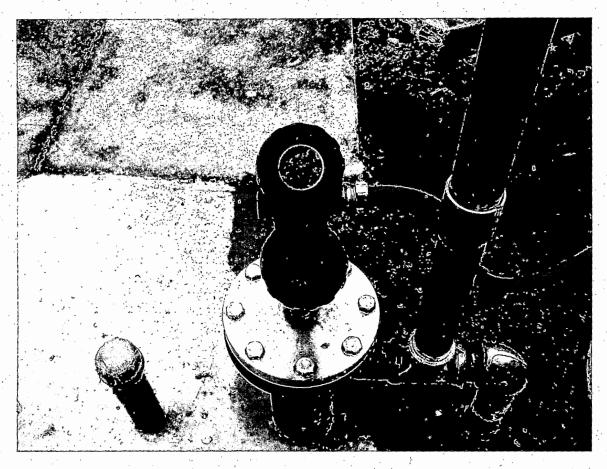
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РНОТО І-10



Fuel Oil UST Area
Close up of the manhole and piping connections from PHOTO I-9

3/23/10



Fuel Oil UST Area Close up of the level monitor assembly

3/23/10



Fuel Oil UST Area
Sign present at the area for fuel oil unloading

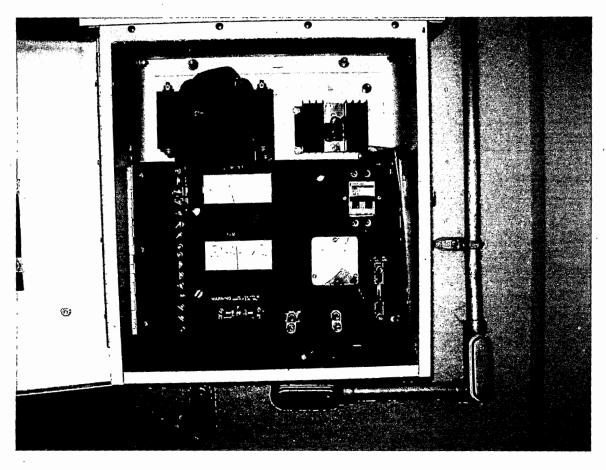
3/23/10



Fuel Oil UST Area – Adjacent Maintenance Shop Rectifier box for the fuel oil UST t system

3/23/10

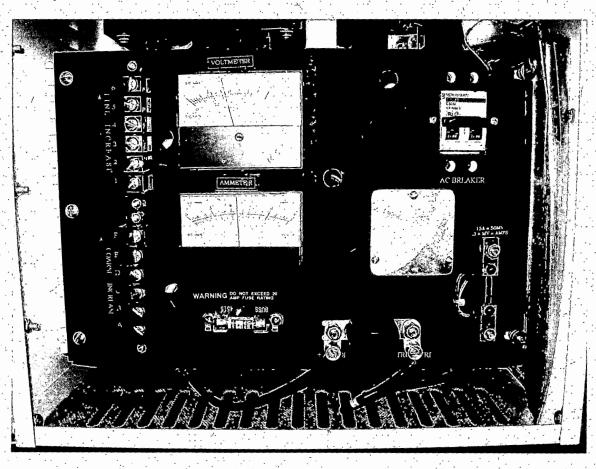
РНОТО I-14



Scale House, across from VAM UST Area Rectifier box for the VAM UST systems

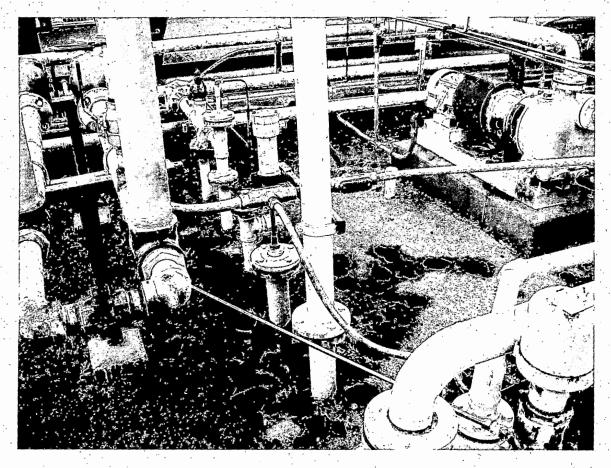
3/23/10

PHOTO I-15



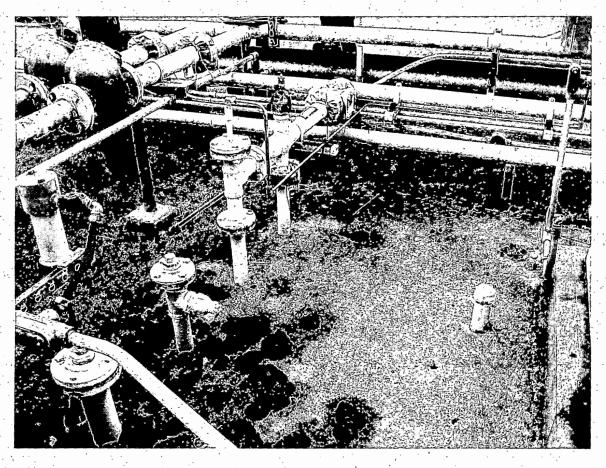
Scale House, across from VAM UST Area Internals of the VAM UST rectifier box

3/23/10



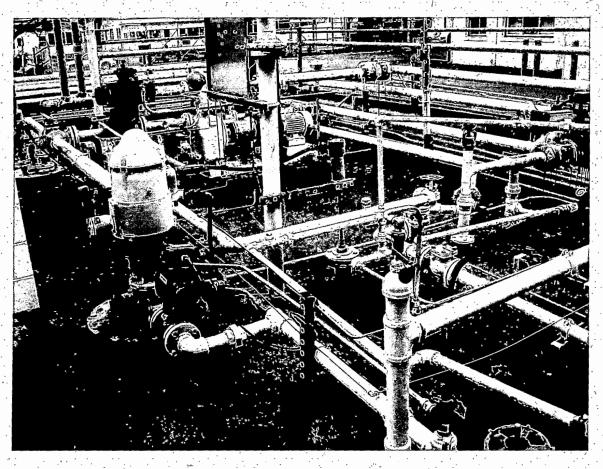
VAM UST Area Piping connections to the VAM South UST

3/23/10

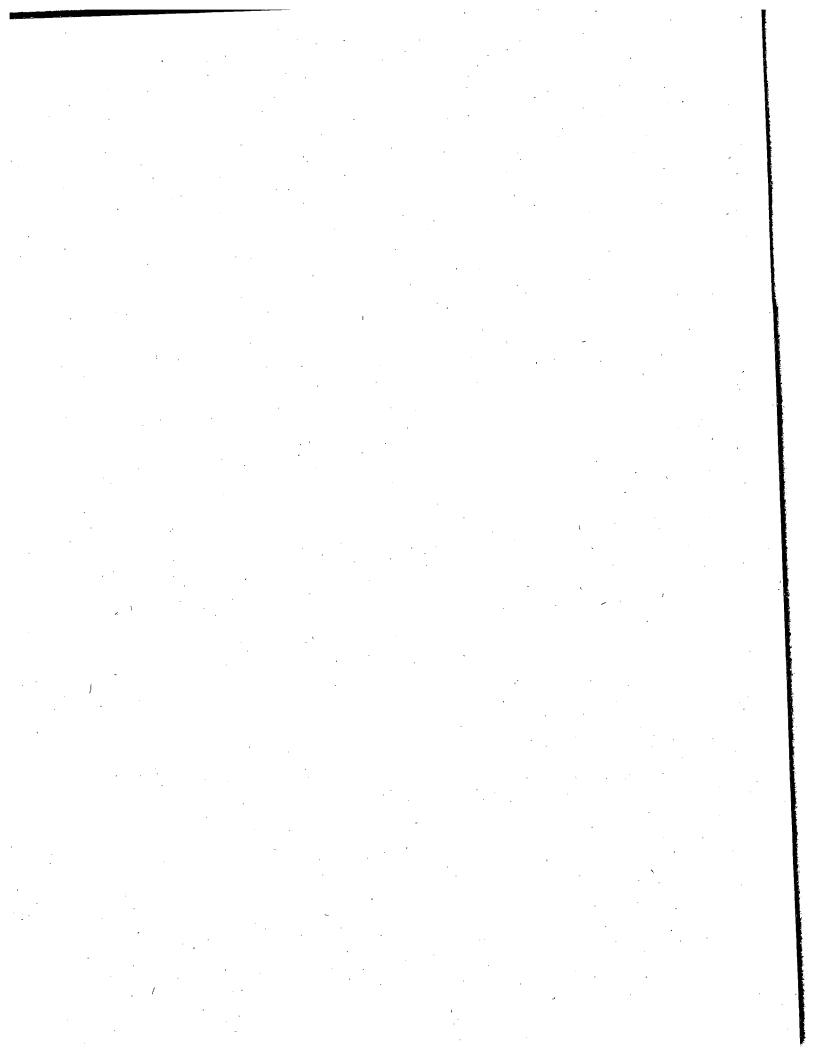


VAM UST Area, piping connections for South VAM UST (4 in line light blue) Left to right (liquid level monitor, capped, pump fill, main fill)

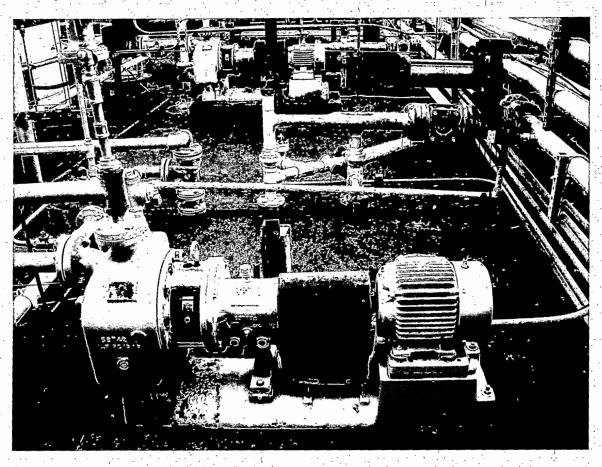
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VAM UST Area
General overview of the area from the NE corner, scale building at right

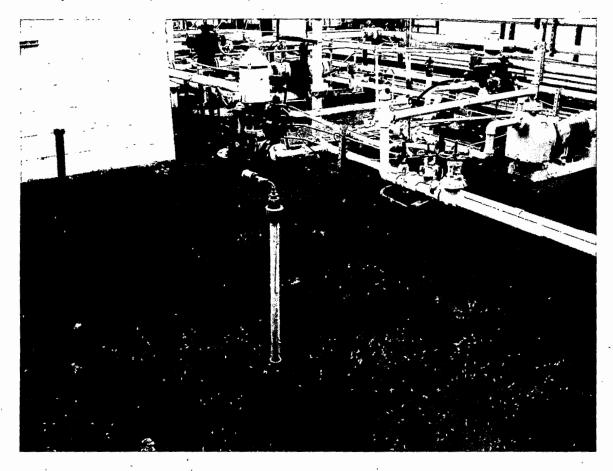


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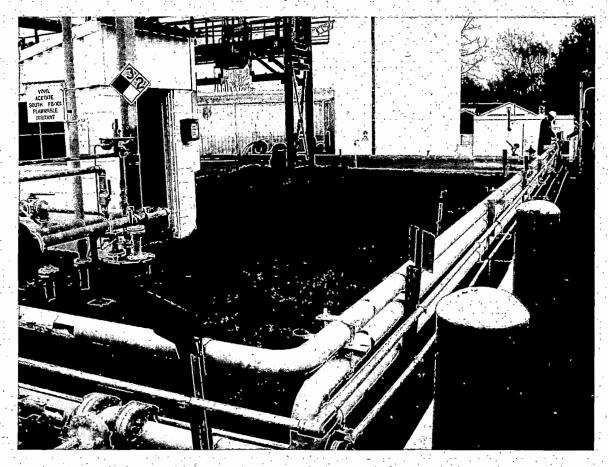
VAM UST Area looking from the North Rotary vane pumps to supply VAM from USTs to Manufacturing

3/23/10



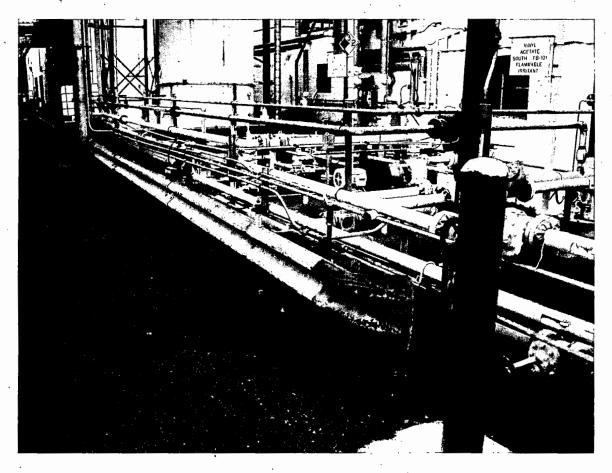
VAM UST Area looking from the NE corner
One of the vapor monitoring ports in the foreground
A third VAM supply pump next to the concrete block structure on left

3/23/10



VAM UST Area looking from SW corner
Two additional vapor monitoring port locations
Tank truck product loading / tank truck VAM unloading area at rear
Concrete block structure from PHOTO I-20 at left

3/23/10



VAM UST Area looking from SE corner Overview of area, effluent tanks at top left